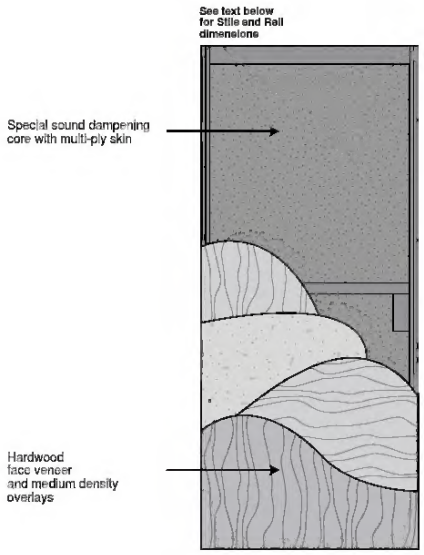
SR Acoustical & Acoustical FD ⅓ Hour Door

(Neutral or Positive Pressure)


See text below for Stile and Rail dimensions
Special sound dampening core with multi-ply skin
Hardwood face veneer and medium density overlays

STC 40/STC 45
STC 43 with 1/3 Hour Label
STC 39 with Lite Opening

Algoma's Acoustical doors were tested as operating units in a complete system with hollow metal framing back-filled with mortar, gasketing, drop seal and threshold, where applicable — the same as supplied to the jobsite — thus ensuring that the specified STC ratings are achieved.

Sound Transmission Class (STC) 40 Acoustical doors should be used wherever the degree of sound insulation desired is higher than an ordinary solid core door can provide.

If a still higher degree of sound reduction is required, such as in hospitals, doctors' offices or conference rooms, the STC 45 Acoustical door may be specified.STC 43 Acoustical doors are available for openings which require both sound control and 1/3-hour fire ratings.

When job requirements include doors with glass openings, STC 39 Acoustical doors are available, non-labeled.

And for communicating doors, a STC-54 rating is achieved when two STC-40 Acoustical doors are installed back-to-back in the same opening.

Testing was conducted by Riverbank Acoustical Laboratories in accordance with ASTM E90-90 and E413-87.

Algoma uses only face veneers at least .020"(0.5mm) thick at 12% moisture content.

Product Features

Thickness	1¾" (44mm)
Maximum size	Non-labeled singles up to 4'0" x 10'0" (1220 x 3050mm) and pairs up to 8'0" x 10'0". In FD ⅓ hour, 4'0" x 8'0" (1220 x 2440mm) singles and 8'0" x 8'0" in STC-28 and STC-43. STC ratings not verifiable in pairs. STC-43 available in 1/3 hour Category B.
Stiles (Edge bands)	4⅞" (124mm) prior to factory trimming, veneer banded.
Special edge treatments	Polymer edges for better impact resistance available.
Top & bottom rails	4⅞" (124mm) prior to factory trimming. Structural composite lumber.
Core	Special core construction with acoustical dampening materials.
Hardware Reinforcement	None required.
Faces	All foreign and domestic species and medium density overlay. Face veneers are a minimum of .020" (0.5mm) thick at 12% moisture content. All faces to be per WDMA I.S.1-A face grades unless otherwise specified.
Adhesives	Doors constructed using water-resistant adhesives (Type 2).
Veneer matching	Pairs or matching transoms non-labeled. Note: Pairs and door/transom units have not been tested and may not maintain STC ratings.
Details	STC 39 doors with acoustical lites not to exceed 400 sq. in. (0.258m^2) visible glass with an acoustical lite kit, gasketing and double-glazed glass. Factory glazing required. Applied molding not available. Lites not allowed in fire rated STC-43.
Machining	Available with hinge and lock machining as well as other hardware. Factory machined for drop seal.
Finishing	Available in finishes with performance characteristics equivalent to WDMA System TR-6, standard or custom colors. Also available primed, sealed, or sealed top and bottom edges only. Opaque finish (OP-6) on medium density overlay only.
Warranty	For interior, full warranty for life of original installation.
Standards met or exceeded	WDMA I.S.1-A Series, ARCHITECTURAL WOOD FLUSH DOORS. Architectural Woodwork Quality Standards Section 1300, Architectural Flush Doors and Section 1500, Factory Finish. Tested by Riverbanks Acoustical Laboratories in accordance with ASTM E90-90 and E413-87 as operating units rather than "sealed in place." STC ratings are verifiable only on single doors.
Special services	Gasketing and drop seal are supplied with doors. Threshold supplied with STC 45, STC 43 and STC 39 doors.
Positive Pressure	**Category B:** Singles and pairs require a category G edge seal applied to the frame. Pairs also require a category G edge seal applied to one of the meeting edges.

ALGOMA HARDWOODS, INC.
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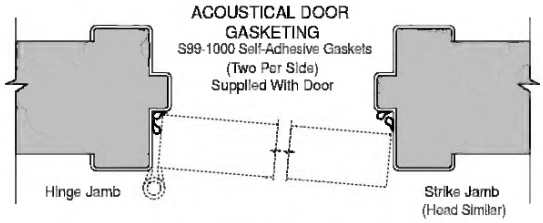
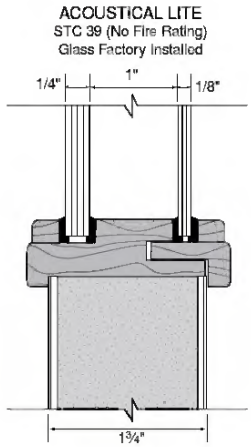
SR Acoustical & Acoustical FD ⅓ Hour Door

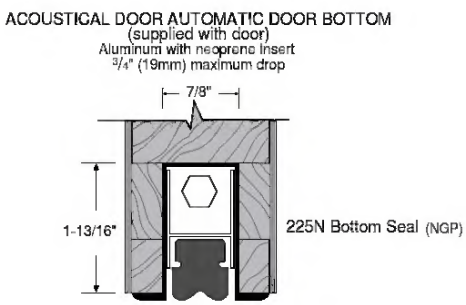
UNDERWRITERS LABORATORIES, INC.
FD 1/3 HOUR FIRE DOOR APPROVAL (STC 28 and STC 43)

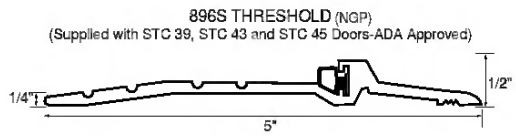
MAXIMUM OPENING SIZE	**Singles:** 4'0" x 8'0" (1220 x 2440mm). **Pairs:** 8'0" x 8'0" (2440 x 2440mm).
FACES	All domestic and imported wood species.
STILES (VERTICAL EDGES)	4⅞" (124 mm) hardwood stiles veneer banded to match face species.
MAXIMUM WOOD BEADED LITE	Not allowed.
MAXIMUM METAL VISION PANEL	Not allowed.
HINGES* **Note: Per NFPA 80 some specialty hinges allowed. Contact Algoma for information.**	Ball bearing steel, full mortise, half surface, or full surface. Minimum size 4½" x .134" (114 x 3.4mm) .
LOCKSETS*	Listed mortise locks, unit locks, and cylindrical locks or hospital push-pull latches to 3¾" (95mm) backset.
CLOSERS*	Listed surface mounted closures.
FIRE EXIT HARDWARE*	Mortise or rim type devices
Door Bottoms:	Doors are supplied with concealed type automatic drop seal.
Maximum trim:	Doors should be ordered factory prefit for height since the bottom is grooved for drop seal.
Prefit:	Standard undercut on STC 39, 43, and 45 will receive a 7/16" undercut to accommodate the ¼" high threshhold. Undercut can be adjusted if floor conditions warrant.

ACOUSTICAL DOOR ACCESSORIES









Sound Transmission Loss Ratings and Door Weight*

Type of installation	Sound Transmission Class (STC)	Transmission loss at various frequencies (Hertz) 125	250	500	1000	2000	4000	Door weight* lbs/sq ft	kg/M²
Single door (with lite opening)	39	26	31	38	41	40	44	6.5	31.7
Single door	40	24	38	40	43	40	41	6.4	31.3
Single door 20 minute label	43	24	35	42	44	45	50	7.1	34.7
Single door with threshold	45	26	39	42	44	48	51	6.4	31.3
Two STC 40 as communicating doors	54	36	47	50	55	57	59	6.4	31.3

* Door size and weight should be considered when determining hardware requirements.

The maximum benefit of acoustical doors is obtained from openings with uniform door/frame edge clearance, correct positioning of gasketing, and proper adjustment of the automatic bottom seal.

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